

## **Algae Control Program Development**

In 2005, the legislature directed Ecology to develop an algae control program that:

- Provides technical assistance to applicants and the public about aquatic algae control; and
- Issues grants to cities, counties, tribe, special purpose districts, and state agencies to manage excessive freshwater algae.

Ecology is required to submit a biennial report to the legislature about this program and the first report is due December 1, 2007. The program is funded through boat registration fees. One dollar from each registration is deposited into the state treasury and these funds may be appropriated to Ecology for this program. Approximately \$509,063 is estimated to be available for the 2005-7 biennium.

Ecology staff met on July 5, 2006, to discuss ideas for this program. Because blue-green algae (cyanobacteria) are potentially harmful to humans and pets and are indicative of declining water quality we agreed that the program should focus on blue-green algae.

The group recommended the following program elements, although these recommendations may be modified based on stakeholder input:

### Technical Assistance:

1. Ecology will provide an algal identification service for lake residents and (perhaps) local health departments. We will make information available via our website on how to collect and mail algae samples to Ecology for identification and, if the species are toxin-forming, provide toxicity testing. The Water Quality Program could either have in-house Environmental Assessment Program staff identify the algae or contract for this service. The Department of Health may have facilities available for algal toxicity testing; or Ecology could contract with a University, or explore the idea of testing in-house (excellent test kits exist).
2. Ecology will use an existing web-based aquatic plant database to report algal identification and toxicity testing results to interested parties.
3. Ecology will need staff for up-front outreach to notify stakeholders that algal identification services are available and staff should be trained to answer inquiries about algae and its control.

Justification: Each year, Ecology receives numerous inquiries about algal blooms/identification (at this time we do not have Ecology staff trained for algal identification). Making identification information available to the public via an on-line database will allow lake residents and local health departments to determine whether algae blooms occur in a specific water body and whether the algae are (potentially) toxin-forming. Over time a body of data will develop that will be beneficial in helping determine which water bodies are experiencing increasing nutrient enrichment.

### Financial Assistance:

There is a direct relationship with the amount of phosphorus entering the system and the amount of algae growth. Reducing phosphorus may reduce algal problems. However, understanding the nutrient dynamics of a water body and reducing phosphorus is very expensive (often millions of dollars per water body) and beyond the scope of this program. Therefore, Ecology staff recommend the following grant program:

- Providing small grants (\$25,000 to \$50,000) awarded on a competitive basis to state and local governments to educate lake groups on ways to reduce nutrients.
- Providing small grants to local health districts to help them develop blue-green algae monitoring and sampling programs to protect human health.

Some lake groups already experiencing severe toxic algae blooms (like Lake Steilacoom or Long Lake, Kitsap County) may object to this proposed grant program since they envisioned being able to apply for these funds to treat algae. Chemical control is expensive and provides short-term relief before the algae reoccurs, treating the symptoms rather than getting to the root cause. We do not think that providing funding for chemical treatment will be a good use of these funds.

### Program Development:

During program development, Ecology staff will solicit feedback from interested parties in several ways:

- Staff participated at a July 13, 2006, blue-green algae (cyanobacteria) forum held by the Washington Department of Health. Other participants included local health department employees. This provided an opportunity for feedback to this proposed program from local and state governments involved with algae management.
- Ecology emailed lake residents, local government lake staff, and other interested parties to solicit feedback for an algae control program.
- The Financial Management Section provided an overview of the algae management program at the August Financial Assistance Advisory Committee and requested feedback from this group.
- Finally Aquatic Weeds staff will add an additional hour onto the Aquatic Weeds Grant workshops held in late September in Lacey and Spokane and use that time specifically to solicit ideas and feedback from participants about an algae program.

After outside input is received, this proposal will be revised and staff will begin refining costs, identifying staff, and developing consultant contracts or interlocal agreements (if needed).